II. Listing of Claims

1.   (Currently Amended)   A method of determining ~~a sequence to administer~~ an order of administration of ~~multiple types~~a plurality of chemo-therapeutic drugs for killing cancerous cells to reduce the induction of drug cross-resistance in a patient, comprising the steps of:

(a)   providing ~~an isogenic~~ a panel of cell strains ~~derived~~ obtained from the same tumor type as said cancerous cells, said panel comprising a parental strain sensitive to all of said drugs and two or more progeny strains each being resistant to a separate one of said chemotherapeutic drugs;

(b)   assessing the sensitivity of each of said progeny strains to each of said drugs relative to the drug-sensitive parental strain to thereby determine the extent of resistance ~~and cross-resistance~~ of each of said strains to each of said drugs;

(c)   determining ~~an~~ said order of administering said drugs using ~~the~~ said sensitivity information, wherein the drug which corresponds to the strain which demonstrates the least resistance to the others of said drugs is determined to be the first to be administered while any other drug which corresponds to a strain which demonstrates a greater cross-resistance is assigned a value as a subsequent drug to be administered.

2.   (Currently Amended)   A method as defined in claim 1, wherein said drugs are assigned ascending values for the order of administration from the drug which corresponds to the strain which demonstrates the least cross-resistance to said drugs to the drug corresponding to the strain which demonstrates the most cross-resistance.

3.   (Currently Amended)   A method as defined in claim 2, wherein said values are determined by assigning a resistance factor to each of said strain/drug combination comprising the ratio of the amount of a selected drug required to kill 50% of said cells of said strain divided by the amount of said selected drug required to kill 50% of the cells of said parent strain, and generating an X by Y cross-resistance array wherein one axis represents said strains and the other axis represents each of said drugs, with the resistance factors being entered within said array for each intersection between X and Y entries, and using said array to assign said ascending values.

4.   (Currently Amended)   The method defined in claim 1, wherein said cancerous cells are selected from breast and uterine cancer cells.

5.   (Currently Amended)   The method defined in claim 1, wherein said drugs are selected from paclitaxel, doxorubicin, epirubicin, ~~5-fluoracil~~ 5-fluorouracil, irinotecan, vinblastine, methotrexate, cisplatine, valspodar, cyclophosphamide, mitoxantrone, topotecan, and bisantrene.

6-11. (cancelled)

12.   (Currently Amended)   A panel comprising a plurality of strains of cells selected from an isogenic cell culture ~~derived~~ obtained from a single cancerous tumor, each said strain comprising a population of isogenic cells, a first said population comprising a parental strain sensitive to a plurality of selected chemotherapeutic drugs, and at least second and third of said populations each being resistant to a different one of said drugs, each of said populations being isogenic with the others of said populations.

13.   (Original)   A panel as defined in claim 12, wherein said cancerous tumor is selected from breast and uterine tumors.

14.   (Currently Amended)   A panel as defined in claim 13, wherein said drugs are selected from paclitaxel, doxorubicin, epirubicin, ~~5-fluoracil~~ 5-fluorouracil, irinotecan, vinblastine, methotrexate, cisplatine, valspodar, cyclophosphamide, mitoxantrone, topotecan, and bisantrene.

15.   (Currently Amended)   A method of determining an <u>order of administration of a plurality</u> ~~a sequence to administer multiple types~~ of cytotoxic drugs for killing ~~undesired~~ harmful cells to reduce the induction of drug cross-resistance in said cells, comprising the steps of:

(a)   providing an isogenic panel of cell strains ~~derived~~ obtained from the same cell type as said undesired cells, said panel comprising a parental strain sensitive to all of said drugs and two or more progeny strains each being resistant to a separate of said drugs;

(b)   assessing the sensitivity of each of said progeny strains to each of said drugs relative to the drug-sensitive parental strain to thereby determine the <u>extent of</u> resistance and cross-resistance of each of said strains to each of said drugs;

(c)   determining ~~an~~ said order of administering said drugs using said sensitivity information, wherein the drug which corresponds to the strain which

demonstrates the least resistance to the others of said drugs is determined to be the first to be administered while any other drug which corresponds to a strain which demonstrates a greater cross-resistance is assigned a value as a subsequent drug to be administered.

16.   (Currently Amended)   A method as defined in claim 15, wherein said drugs are assigned ascending values for the order of administration from the drug which corresponds to the strain which demonstrates the least cross-resistance to said drugs to the drug corresponding to the strain which demonstrates the most cross-resistance.

17.   (Currently Amended)   A method as defined in claim 16, wherein said values are determined by assigning a resistance factor to each of said strain/drug combination comprising the ratio of the amount of a selected drug required to kill 50% of said cells of said strain divided by the amount of said selected drug required to kill 50% of the cells of said parent strain, and generating an X by Y cross-resistance array wherein one axis represents said strains and the other axis represents each of said drugs, with the resistance factors being entered within said array for each intersection between X and Y entries, and using said array to assign said ascending values.

18.   (cancelled)